



TYPE-R SUBWOOFER APPLICATION GUIDE GUIDE D' APPLICATION

SWR-1521D

15 Inch Subwoofer for Sealed or Vented Enclosure (2 Ω) +(2 Ω)
Haut-parleur de sous-graves de 15 pouces (38 cm)
pour boîtier étanche (2 Ω) + (2 Ω)

SWR-1541D

15 Inch Subwoofer for Sealed or Vented Enclosure (4 Ω) +(4 Ω)
Haut-parleur de sous-graves de 15 pouces (38 cm)
pour boîtier étanche (4 Ω) + (4 Ω)

SWR-1221D

12 Inch Subwoofer for Sealed or Vented Enclosure (2 Ω) +(2 Ω)
Haut-parleur de sous-graves de 12 pouces (30 cm)
pour boîtier étanche (2 Ω) + (2 Ω)

SWR-1241D

12 Inch Subwoofer for Sealed or Vented Enclosure (4 Ω) +(4 Ω)
Haut-parleur de sous-graves de 12 pouces (30 cm)
pour boîtier étanche (4 Ω) + (4 Ω)

SWR-1021D

10 Inch Subwoofer for Sealed or Vented Enclosure (2 Ω) +(2 Ω)
Haut-parleur de sous-graves de 10 pouces (25 cm)
pour boîtier étanche (2 Ω) + (2 Ω)

SWR-1041D

10 Inch Subwoofer for Sealed or Vented Enclosure (4 Ω) +(4 Ω)
Haut-parleur de sous-graves de 10 pouces (25 cm)
pour boîtier étanche (4 Ω) + (4 Ω)

● SPECIFICATIONS

| Model | SWR-1521D | SWR-1541D | SWR-1221D | SWR-1241D | SWR-1021D | SWR-1041D |
|--------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Size | 15" | 15" | 12" | 12" | 10" | 10" |
| Impedance | 2Ω+2Ω | 4Ω+4Ω | 2Ω+2Ω | 4Ω+4Ω | 2Ω+2Ω | 4Ω+4Ω |
| Power Handling (RMS/Peak) | 500W/1500W | 500W/1500W | 300W/1000W | 300W/1000W | 300W/1000W | 300W/1000W |
| Frequency Response | Fs~1kHz | Fs~1kHz | Fs~1kHz | Fs~1kHz | Fs~1kHz | Fs~1kHz |
| Sensitivity* | 89dB | 89dB | 87dB | 87dB | 85dB | 85dB |
| D.C. Coil Resistance (Re) | 1.8 Ω + 1.8 Ω | 4.0 Ω + 4.0 Ω | 1.8 Ω + 1.8 Ω | 3.6 Ω + 3.6 Ω | 1.8 Ω + 1.8 Ω | 3.6 Ω + 3.6 Ω |
| Inductance (Le) 1kHz/20kHz | 3.72mH/1.15mH | 6.20mH/1.86mH | 2.41mH/0.84mH | 3.85mH/1.34mH | 2.67mH/0.88mH | 3.92mH/1.39mH |
| Free Air Resonance (Fs) | 23Hz | 24Hz | 27Hz | 28Hz | 29Hz | 30Hz |
| Equivalent Stiffness (Vas) | 98L | 98L | 58L | 58L | 29L | 29L |
| Qms/Qes/Qts | 9.84/0.40/0.38 | 9.68/0.50/0.48 | 8.68/0.40/0.38 | 8.31/0.45/0.43 | 8.93/0.40/0.38 | 8.76/0.43/0.41 |
| X max / X peak | 16.5mm/33mm | 14.5mm/29mm | 13.35mm/26.7mm | 13.87mm/27.74mm | 13.35mm/26.7mm | 13.87mm/27.74mm |
| Mechanical Excursion (P-P) | 68mm | 68mm | 55mm | 55mm | 55mm | 55mm |
| Gap/Coil Height (Hag/Hvc) | 15mm/48mm | 15mm/44mm | 10mm/36.7mm | 10mm/37.74mm | 10mm/36.7mm | 10mm/37.74mm |
| Cone Area (Sd) | 754.77 cm² | 754.77 cm² | 467.59 cm² | 467.59 cm² | 320.47 cm² | 320.47 cm² |
| Diaphragm Material | Kevlar Reinforced Pulp | Kevlar Reinforced Pulp | Kevlar Reinforced Pulp | Kevlar Reinforced Pulp | Kevlar Reinforced Pulp | Kevlar Reinforced Pulp |
| Spider Material | Nomex | Nomex | Nomex | Nomex | Nomex | Nomex |
| Magnet Weight | 129.6oz | 129.6oz | 89.4oz | 89.4oz | 64oz | 64oz |
| Voice Coil Diameter | 65mm | 65mm | 50mm | 50mm | 50mm | 50mm |
| Displacement (front mount)** | 0.249 ft³ | 0.249 ft³ | 0.128 ft³ | 0.128 ft³ | 0.092 ft³ | 0.092 ft³ |
| Displacement (rear mount) | 0.322 ft³ | 0.322 ft³ | 0.163 ft³ | 0.163 ft³ | 0.115 ft³ | 0.115 ft³ |
| Added Volume (reverse mount)** | 0.162 ft³ | 0.162 ft³ | 0.073 ft³ | 0.073 ft³ | 0.047 ft³ | 0.047 ft³ |
| Recommended Sealed Box Volume | 1.3-2.5 ft³ | 1.3-2.5 ft³ | 0.7~1.0 ft³ | 0.7~1.0 ft³ | 0.5~0.8 ft³ | 0.5~0.8 ft³ |

* This commonly misunderstood specification should not be used as a reference for subwoofer output capability.

** Based upon 3/4" (~20mm) baffle thickness, with opening cut to gasket inner diameter

Notes: Thiel-Small parameters were measured and averaged after break-in.

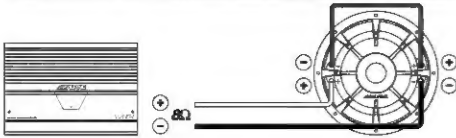
Various measurement techniques may produce different but equally valid results.

All specifications are subject to change without notice

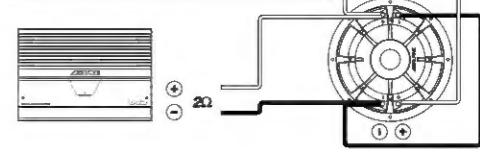
● SPECIFICATIONS

| Model | SWR-1521D | SWR-1541D | SWR-1221D | SWR-1241D | SWR-1021D | SWR-1041D |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Dimensions | 15" | 15" | 12" | 12" | 10" | 10" |
| Impedance | 2Ω+2Ω | 4Ω+4Ω | 2Ω+2Ω | 4Ω+4Ω | 2Ω+2Ω | 4Ω+4Ω |
| Puissance (RMS/Peak) | 500W/1500W | 500W/1500W | 300W/1000W | 300W/1000W | 300W/1000W | 300W/1000W |
| Réponse en fréquence | Fs~1kHz | Fs~1kHz | Fs~1kHz | Fs~1kHz | Fs~1kHz | Fs~1kHz |
| Sensibilité | 89dB | 89dB | 87dB | 87dB | 85dB | 85dB |
| Résistance en continu (Re) | 1.8 Ω + 1.8 Ω | 4.0 Ω + 4.0 Ω | 1.8 Ω + 1.8 Ω | 3.6 Ω + 3.6 Ω | 1.8 Ω + 1.8 Ω | 3.6 Ω + 3.6 Ω |
| Inductance (Le) 1kHz/20kHz | 3.72mH/1.15mH | 6.20mH/1.86mH | 2.41mH/0.84mH | 3.85mH/1.34mH | 2.67mH/0.88mH | 3.92mH/1.39mH |
| Fréquence de résonance (Fs) | 23Hz | 24Hz | 27Hz | 28Hz | 29Hz | 30Hz |
| Raideur equivalente (Vas) | 98L | 98L | 58L | 58L | 29L | 29L |
| Qms/Qes/Qts | 9.84/0.40/0.38 | 9.68/0.50/0.48 | 8.68/0.40/0.38 | 8.31/0.45/0.43 | 8.93/0.40/0.38 | 8.76/0.43/0.41 |
| X max / X crête | 16.5mm/33mm | 14.5mm/29mm | 13.35mm/26.7mm | 13.87mm/27.74mm | 13.35mm/26.7mm | 13.87mm/27.74mm |
| Excursion mécanique (P-P) | 68mm | 68mm | 55mm | 55mm | 55mm | 55mm |
| Largeur Entrefer/Bobine (Hag/Hvc) | 15mm/48mm | 15mm/44mm | 10mm/36.7mm | 10mm/37.74mm | 10mm/36.7mm | 10mm/37.74mm |
| Surface de cône (Sd) | 754.77 cm² | 754.77 cm² | 467.59 cm² | 467.59 cm² | 320.47 cm² | 320.47 cm² |
| Membrane | Kevlar renforcé | Kevlar renforcé | Kevlar renforcé | Kevlar renforcé | Kevlar renforcé | Kevlar renforcé |
| Suspension | Nomex | Nomex | Nomex | Nomex | Nomex | Nomex |
| Poids de l'aimant | 129.6oz | 129.6oz | 89.4oz | 89.4oz | 64oz | 64oz |
| Diamètre de bobine | 65mm | 65mm | 50mm | 50mm | 50mm | 50mm |
| Displacement (en avant) | 0.249 ft³ | 0.249 ft³ | 0.128 ft³ | 0.128 ft³ | 0.092 ft³ | 0.092 ft³ |
| Displacement (en arrière) | 0.322 ft³ | 0.322 ft³ | 0.163 ft³ | 0.163 ft³ | 0.115 ft³ | 0.115 ft³ |
| Volume en plus (en renverse) | 0.162 ft³ | 0.162 ft³ | 0.073 ft³ | 0.073 ft³ | 0.047 ft³ | 0.047 ft³ |
| Volume de charge recommandé | 1.3-2.5 ft³ | 1.3-2.5 ft³ | 0.7~1.0 ft³ | 0.7~1.0 ft³ | 0.5~0.8 ft³ | 0.5~0.8 ft³ |

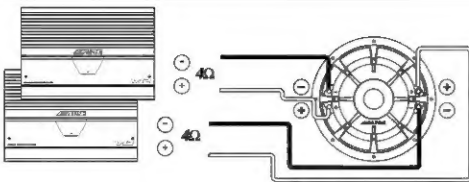
Example 1 One Amplifier and One Subwoofer



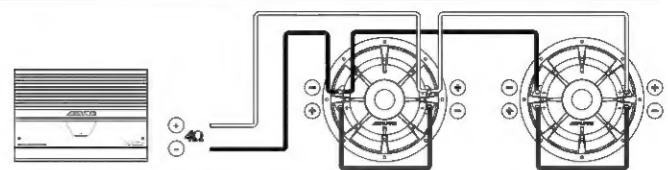
Example 2 One Amplifier and One Subwoofer



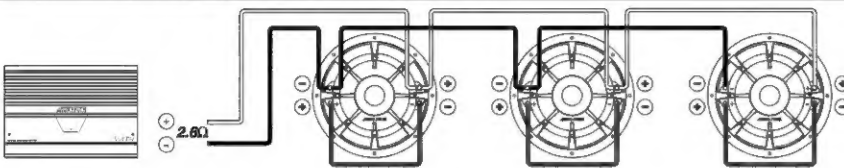
Example 3 Two Amplifiers and One Subwoofer



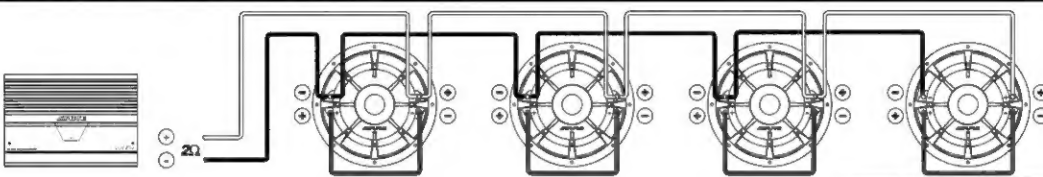
Example 4 One Amplifier and Two Subwoofers



Example 5 One Amplifier and Three Subwoofers



Example 6 One Amplifier and Four Subwoofers

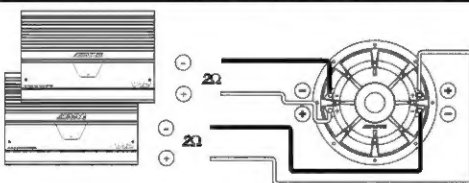


TYPE-R WIRING WORKSHEET

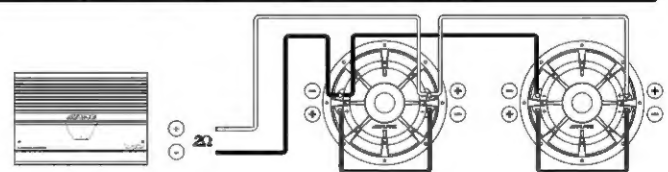
Example 1 One Amplifier and One Subwoofer



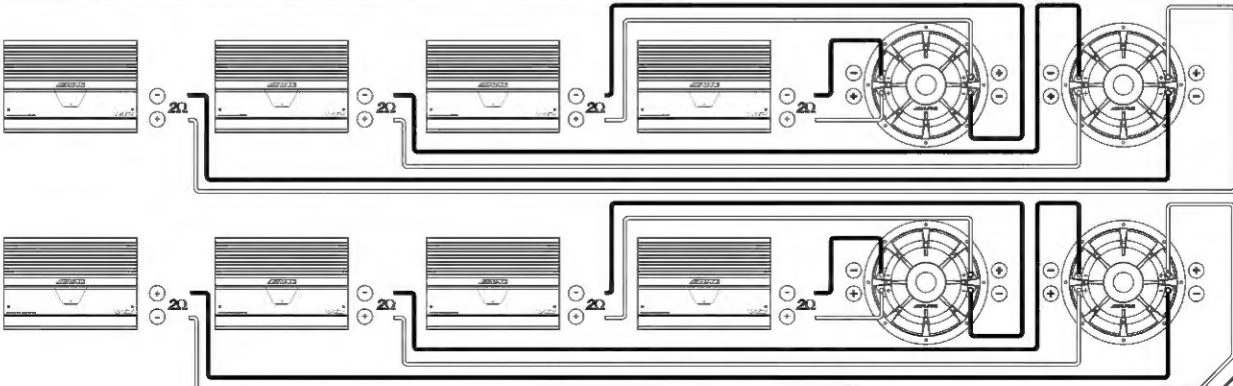
Example 2 Two Amplifiers and One Subwoofer



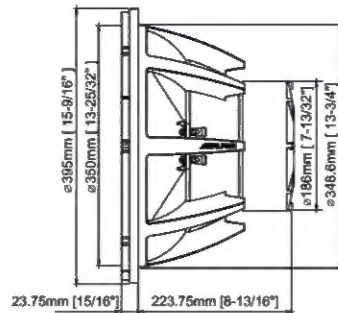
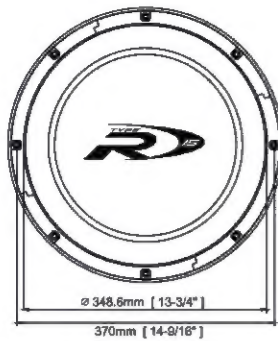
Example 3 One Amplifier and Two Subwoofers



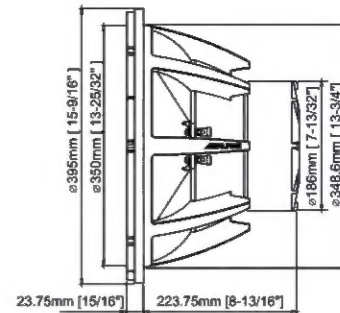
Example 4 Eight Amplifiers and Four Subwoofers-Competition Diagram



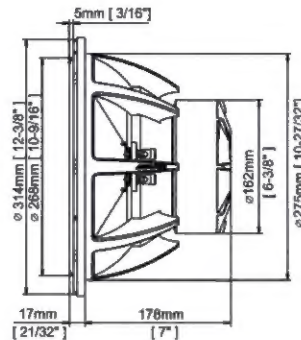
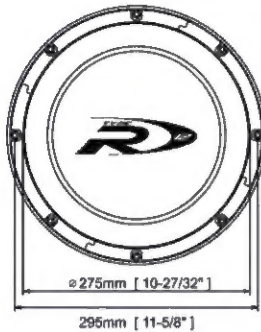
TYPE-R WIRING WORKSHEET



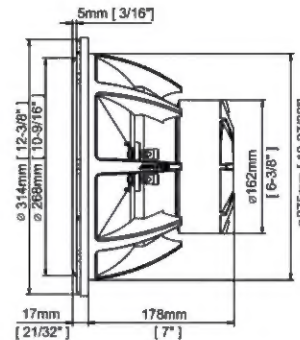
SWR-1521D



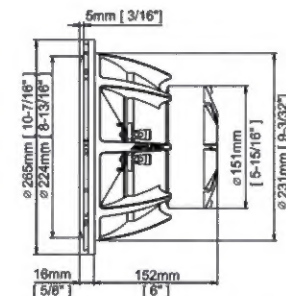
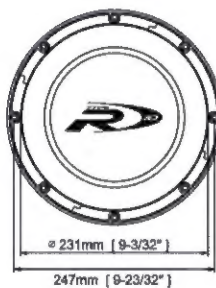
SWR-1541D



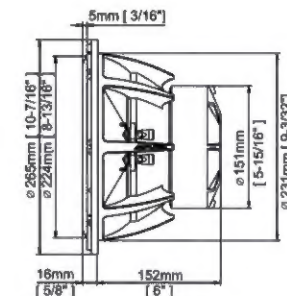
SWR-1221D



SWR-1241D



SWR-1021D



SWR-1041D

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